

Notice of Allowability

Application No.

10/602,247

Examiner

Edwin A. León

Applicant(s)

KORSUNSKY ET AL.

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Interview Summary of 12/10/03.
2. ☒ The allowed claim(s) is/are 5 and 9.
3. ☒ The drawings filed on 23 June 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>121003</u> . |
| 3 <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____ | 7 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other _____ |

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Wei Te Chung on December 10, 2003.

The application has been amended as follows:

Please cancel Claims 1-4, 6-8, and 10.

On Claim 5, Line 15, after "terminal", add -- , each terminal comprises a pair of spaced-apart legs projecting from the body portion and extending beyond the mating face of the housing and adapted for mating with a complementary contact, each terminal has a tail portion extending from the body portion along a direction away from the spaced-apart legs and the tail portion of each terminal has a solder pad having a circular-shaped cross section and a solder ball attached on the solder pad.

On Claim 9, Line 19, after "direction", add – and wherein deformation or collapse of said joint section results from movement of the first portion in said insertion direction--

Allowable Subject Matter

2. Claims 5 and 9 are allowed.

The following is an examiner's statement of reasons for allowance:

Wu et al. (U.S. Patent No. 6,171,126) discloses a connector (1) having an insulating housing (11) having terminal receiving channels (12), and terminals (2) having shoulders (28), recessed portions (42), tails (24) and legs (32). See Figs. 1-3.

Yu (U.S. Patent No. 6,439,934) discloses a connector (100) having an insulating housing (1) having terminal receiving channels (13), and terminals (2) having shoulders (23), recessed portions (231), tails (22) and legs (230). See Figs. 1-3.

Azuma (U.S. Patent No. 6,425,785) discloses a connector (12) having an insulating housing (16) having terminal receiving channels (Fig. 2), and terminals (24) having shoulders (28), legs (32) and a solder portion (30). See Figs. 1-6c.

However, the references fail to teach, disclose, or suggest, either alone or in combination, regarding Claim 5, a recessed portion being formed under the shoulder, such that the shoulder press the step portion of the channel downwardly, which lead to the step portion being depressed and collapsed, during the insertion of the terminal from the mating face of the housing into the channel, and such that part of the step portion is pressed into the recessed portion of the terminal, thereby providing a permanently engaging force between the depressed step portion of the channel and the recessed portion of the terminal and the tail portion of each terminal has a solder pad having a circular-shaped cross section and a solder ball attached on the solder pad, and

regarding Claim 9, a joint section of the housing between the first section and the second section is either deformed or collapsed to be embedded within the recess for preventing movement of the terminal relative to the corresponding channel along said lengthwise direction and wherein deformation or collapse of said joint section results from movement of the first portion in said insertion direction and in combination with the rest of the limitations in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Viselli et al. (U.S. Patent No. 5,037,334), Vanbesien et al. (U.S. Patent No. 5,639,269), Puerner (U.S. Patent No. 5,340,320), Stein (U.S. Patent No. 3,621,444) and Billman et al. (U.S. Patent No. 6,634,911) disclose connectors having insulating housings, conductive terminals having legs and tail portions.

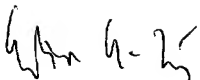
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



THO D. TA
PRIMARY EXAMINER



Edwin A. Leon
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EAL
December 11, 2003